

An exhibit showing some of the work of the Board of Medical Examiners of the State of California will have a place in the building.

Los Angeles City and County Health Department will present a diphtheria prevention demonstration, and the Automobile Club of Southern California will install a safety exhibit.

Demonstrations of proper feeding of infants will be shown by the West Nursing Bureau and the Southwestern Pediatric Society, and the Pacific Coast Obstetrical Society will also participate.

Combined forces of the California Dairy Council and the Arbitration Board of the San Diego County dairy industry, under direction of Douglas Young and Wilbur Thomas, will present an exhibit, and the San Diego City and County Health Department, will cooperate under the direction of Dr. Alex Lessem, city and county health officer. Nurses, headed by Miss Ilma Lucas, nutritionist of the California Dairy Council, will act as hostesses.

In addition to the educational exhibits there will be lectures and daily presentations of motion pictures on medical subjects interesting to the general public.

The American College of Surgeons has offered to cooperate by sending speakers to the Palace of Medical Science during the exposition. During the school vacations, special motion pictures on health subjects, designed to appeal primarily to children, will be added to the programs.

Commercial displays of prominent pharmaceutical establishments and manufacturers of medical supplies also will be housed in the medical building. One of the first to be installed will be that of the General Electric X-Ray Corporation of Chicago.

It is predicted that the medical exhibits at the 1936 exposition will be the most extensive yet displayed, and will equal or surpass that at Chicago's Century of Progress expositions. The whole Palace of Medical Science will be devoted solely to exhibits treating on the prevention and treatment of disease, and it will form one of the important features of this world's fair, which is dedicated to mankind's progress in all realms of science, art, and industry.

Other State Association and Component County Society News.—Additional news concerning the activities and work of the California Medical Association and its component county medical societies is printed in this issue, commencing on page 116.

EDITORIAL COMMENT[†]

DINITROPHENOL AND REDUCING

Much time has been devoted by medical science to a study of fat metabolism and to a solution of the problems concerned in the origin, pathogenesis and treatment of overweight. Practitioners of medicine are forced into daily consideration of the same problems through the frequency with which they are consulted regarding the reduction of weight. Much of their effort, however, has perforce been spent in an attempt to teach the fallacy of the many fads, "cures" and short-cuts so widely advertised for the relief of the condition. The advent of dinitrophenol, it was hoped, would do much to simplify the whole problem.

[†] This department of CALIFORNIA AND WESTERN MEDICINE presents editorial comment by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California and Nevada Medical Associations to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

A review of some 290 cases from the literature, in which dinitrophenol has been administered, seems to warrant several rather definite conclusions. First, the loss of weight under diet and dinitrophenol is not strikingly greater than under diet alone. Secondly, distressing symptoms are commonly attendant upon its use. Thirdly, the toxic effects of the drug upon body function and tissue cannot be denied. Fourthly, the reported deaths from dinitrophenol administration in accepted therapeutic dosages make it hard to justify its widespread application in the relatively benign condition of overweight. Let us, therefore, consider these points seriatim.

Loss of Weight.—Of the 290 patients mentioned, 276 showed loss of weight. In some instances, no loss or actual gain has been reported.¹⁻⁵ The burden of evidence shows the undoubted ability of the drug to cause loss of weight, although the mechanisms through which this is accomplished are not thoroughly understood. Bayer and Gray¹ and Strang and Evans⁶ have carefully compared the rate of weight loss with and without the drug in their series of cases. The former find weight loss accelerated by the use of dinitrophenol to a greater extent than by thyroid substance. While Strang and Evans observe greater losses of weight in the cases receiving dinitrophenol than in those treated by diet alone, they feel the difference is hardly striking enough to offset the discomfort and possible damage the drug may do. Moreover, very little has been reported as to the behavior of patients subsequent to discontinuance of the drug, while still under dietary regulation.

Distressing Symptoms.—Among the distressing symptoms, one must give prominence to sensations of heat, marked sense of warmth, flushing of the skin, and profuse sweating, all of which may be looked upon as "physiologic" responses to the medication. These manifestations occurred to a greater or lesser extent in the 290 patients above mentioned. In the same groups, some type of skin condition was noted in sixty-eight individuals. This was usually an urticarial or maculopapular eruption, commonly accompanied by intense itching, and at times associated with bleb formation. Commonly reported symptoms were fever, hyperpnea, dyspnea, general malaise, tiredness, exhaustion, dizziness, faintness, headaches, and paraesthesias, at times going on to true neuritis; and pains in various parts of the body, particularly in the calves of the legs, back, and epigastrium.

¹ Bayer, L. M., and Gray, H.: Obesity Treatment of Diet, Thyroid and Dinitrophenol, *Am. J. M. Sc.*, 189:86, 1930.

² Finkelmores, I., and Stephens, W. M.: Dinitrophenol in Dementia Praecox, *J. Neurol. and Psychopath.*, 15:230, 1935.

³ Grant, L., and Schube, P. G.: The Effect of Alpha-dinitrophenol on Blood Cholesterol in Man, *J. Lab. and Clin. Med.*, 20:56, 1934.

⁴ Masserman, Jules H.: Dinitrophenol—Its Therapeutic and Toxic Actions in Certain Types of Psychobiologic Underactivity, *J. A. M. A.*, 102:523, 1934.

⁵ Tainter, M. L., Stockton, A. B., and Cutting, W. C.: Use of Dinitrophenol in Obesity and Related Conditions, *J. A. M. A.*, 101:1472, 1933.

⁶ Strang, J. M., and Evans, F. A.: An Evaluation of Dinitrophenol as an Aid in Weight Reduction, *J. A. M. A.*, 104:1957, 1935.

Less commonly observed were palpitation, anxiety, restlessness, anorexia, sore throat, delirium, and coma. Sore throat and swollen neck glands were found in two instances, with "malignant" neutropenia.

Toxic Effects.—A very good review of the toxic effects of dinitrophenol upon function and tissue has been made by MacBryde and Taussig,⁷ who have added some experimental results of their own. Among their conclusions we find: "Dinitrophenol in small doses caused functional changes indicative of toxicity in liver, heart and muscles, in a large percentage of patients in whom no special idiosyncrasy was noted. It also produced a loss of dextrose tolerance." If one carefully scans the effects of dinitrophenol on carbohydrate and fat metabolism, one is led to ponder upon the probability of permanent disturbances in both function and tissue subsequent to withdrawal of the drug.

Reported Deaths.—Seven of the 290 cases, of which we have spoken, eventuated in death; of these patients five received amounts of the drug well within the recommended therapeutic dosage.

Finally, experiences with dinitrophenol should emphasize the fact that "there is no royal road to reduction." Jones⁸ has well stated that people grow fat because of an excess of intake over output. It would seem that diet should still remain the fundamental keystone in the management of the overweight and obese patient: it should be supplemented by medication only as the individual case may require it.

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THE GENERAL PRACTITIONER AND PROSTATIC SURGERY

During the past four years volumes have been written in medical journals, and much has been written and said among the lay persons regarding the electrical, or "new" operation for enlarged prostates. Much of this literature is conflicting, and much of it is misleading, particularly that circulated among the laity. The old maxim, "a little knowledge is dangerous," is exemplified more vividly by the patients who think that they know about their illness or methods of treatment and surgical procedures. It is, therefore, not unusual to have a patient come to a physician with a preconceived idea of his ailment and the treatment indicated. With the proper explanation, the average intelligent patient can be convinced of the fallacy of his opinion, and the physician is permitted to work unhampered.

Much worse than the erroneous opinions of the patient are the erroneous ideas of the physician himself on subjects of which he can of necessity

not be thoroughly informed. I refer here to the subject of the treatment of prostatic hypertrophy. The physician who does not do genito-urinary surgery is not expected to keep completely informed of the details of the developments in urologic work. As stated before, the medical literature on the subject of treatment of prostatic hypertrophy has been so voluminous and conflicting that a perusal of the same would leave one somewhat confused. It is only the person who actually does the work, and is familiar with the disadvantages as well as the advantages of the various procedures, who can properly evaluate what he reads.

Further, the present status of the treatment of prostatic hypertrophy is sufficiently flexible to allow for several acceptable and desirable surgical procedures. The particular procedure to be selected for the case under consideration is determined by several factors, namely, the patient's general condition, associated urologic pathology, type of prostatic enlargement and, even at times, the patient's social status and future requirements. In order to determine the above factors, one must necessarily do a complete urologic examination. It is, therefore, apparent that the general practitioner who originally sees the patient and makes the diagnosis of prostatic obstruction is not in a position to make final recommendations as to the procedure indicated in the particular case. When the patient is told that he has an enlarged prostate that will probably require surgery, he frequently asks if he can be treated by the "new electrical method." Many prostatic patients have heard of others who have been operated in that way and, therefore, assume that they are eligible to the same procedure in contradistinction to the "old cutting operation." The patients have an impression that this is a simple procedure, with no risk attached to it and complete cure in every case. This is true in a large percentage of cases, but is, unfortunately, not true in every case. The attending physician is prone to promise the patient this new operation and to refer him to the urologist with that in mind. When the urologist completes his examination and tells the patient that he finds the resection to be undesirable, it is then very difficult to convince the patient of the need of the "cutting operation."

It would seem permissible, therefore, to make a plea to the referring physicians to leave the matter of choice of procedure to the urologist who will do the surgery. A large per cent of prostatic hypertrophies can be properly treated by resection, so one is justified, where necessary, in telling the patient that resection will probably be the indicated procedure. Many are of the belief that the most desirable method of handling this situation is to explain to the patient that he requires a complete urologic examination in order to determine the particular type of enlargement that he has, and to see if he has any associated pathology before recommending the type of surgery to be employed.

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⁷ MacBryde, C. M., and Taussig, B. L.: Functional Changes in Liver, Heart and Muscles, and Loss of Dextrose Tolerance Resulting from Dinitrophenol, J. A. M. A., 105: 13, 1935.

⁸ Jones, H. M.: The Basal Metabolic Rate in Simple and Pathological Obesity, J. Lab. and Clin. Med., 11:959, 1926.